Modelling Internet Traffic through Geographic Time and Space

Global Internet traffic can be modelled by a set of equations describing the periodicity of the time-based distributions of congestion. Congestion can be generated, firstly, by peak traffic from different time zones or secondly, by inadequacies within the regional network. The model is a dynamic form of spatial interaction modelling and can investigate the time delay of pings and packet loss at routers. The book will develop this model showing that it has characteristics peculiar to the Internet and develops the concept of relative time dependent on time zone origin of traffic.

Features
► An original contribution to the field of cyber-space and cyberstructure ► This book covers the interdisciplinary field between geography and information science

Contents
Preface, - 1. Introduction, - 2. Visualising Internet Traffic Flows, - 3. The Internet Differential Equation, - 4. The Global Demand Wave, - 5. The Distance Decay of Internet Traffic, - 6. The Phase Metric of Internet Demand, - 7. The Limit of Internet Information Transfer, - 8. The Evolving Internet Dynamic, - 9. The Problem of the Island Effect: Japan, UK and Australia, - 10. Socio-economic net Dynamic, - 9. The Problem of the Island Effect: Shichuan, and California to a Californian? How are physical and human geographical factors reflected in their present-day inhabitants? And how are these factors interrelated? How does history, culture, socio-economy, language and demography impact and characterize and identify an average person in such regions today? How does that determine her or his well-being, behaviour, ambitions and perspectives for the future? These are the type of questions that are central to The World Regional Geography Book Series, where physically and socially coherent regions are being characterized by their roots and future perspectives described through a wide variety of scientific disciplines.

The Book Series presents a dynamic overall and in-depth picture of specific regions and their people. In times of globalization renewed interest emerges for the region as an entity, its people, its landscapes and their roots. Books in this Series will also provide insight in how people from different regions in the world will anticipate on and adapt to global challenges as climate change and to supra-regional mitigation measures. This, in turn, will contribute to the ambitions of the International Year of Global Understanding to link the local with the global, to be proclaimed by the United Nations as a UN-Year for 2016, as initiated by the International Geographical Union. Submissions to the Book Series are also invited on the theme “The Geography of…” with a relevant subtitle of the authors/editors choice. Proposals for the series will be considered by the Series Editor and International Editorial Board. An author/editor questionnaire and instructions for authors can be obtained from the Publisher, Dr. Robert K. Doe (robert.doe@springer.com).

New Series
World Regional Geography Book Series
Series editor: E. de Mulder

What does Finland mean to a Fin, Sichuan to a Sichuanian, and California to a Californian? How are physical and human geographical factors reflected in their present-day inhabitants? And how are these factors interrelated? How does history, culture, socio-economy, language and demography impact and characterize and identify an average person in such regions today? How does that determine her or his well-being, behaviour, ambitions and perspectives for the future? These are the type of questions that are central to The World Regional Geography Book Series, where physically and socially coherent regions are being characterized by their roots and future perspectives described through a wide variety of scientific disciplines.

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The Geography of Georgia
Problems and Perspectives

This book discusses the political and economic history and geography of Georgia and the problems it has faced and how it has overcome and is overcoming them.

Features
► Provides glimpses into how Georgia came into being as a nation ► Recounts the political and cultural evolution of Georgia ► Addresses the place of Georgia in the modern world

Contents

Fields of interest
Economic Geography; Geotechnical Engineering & Applied Earth Sciences; Migration

Target groups
Research

Discount group
Professional Non-Medical
Principle and Application Progress in Location-Based Services

These proceedings are aimed at researchers, industry / market operators and students from different backgrounds (scientific, engineering and humanistic) whose work is either focused on or related to Location Based Services (LBS). It contributes to the following areas: positioning / indoor positioning, smart environments and spatial intelligence, spatiotemporal data acquisition, processing, analysis, data mining and knowledge discovery, personalization and context-aware adaptation, LBS visualization techniques, novel user interfaces and interaction techniques, smart phone navigation and LBS techniques, three-dimensional visualization in the LBS context, augmented reality in an LBS context, innovative LBS systems and applications, wayfinding / navigation (indoor/outdoor), indoor navigation databases, user studies and evaluations, privacy issues in LBS, usability issues in LBS, legal and business aspects of LBS, LBS and Web 2.0, open source solutions and standards, ubiquitous computing, smart cities and seamless positioning.

Features
- The latest advances in location based services (LBS)
- Advanced information on user-interface and human-computer interaction for mobile devices
- The most recent products for seamless positioning, navigation etc

Fields of interest
Geographical Information Systems/Cartography; Information Systems Applications (incl. Internet); Data Mining and Knowledge Discovery

Target groups
Research

Discount group
Professional Non-Medical

Beyond the North-South Culture Wars
Reconciling Northern Australia’s Recent Past With Its Future

Increasingly, Australia’s agriculturalists are looking to the nation’s north to escape the decline in southern Australia’s water and soil resources. Booming mineral and gas development is also helping to drive the nation’s economic success. At the same time, the south’s conservation sector would like to see much of the north preserved as iconic wilderness. Both conservation and resource development interests are often at odds with the interests of the north’s traditional owners, many of whom remain trapped in welfare dependency and poverty. Indeed, to the ire of north Australians, the past four decades of north Australian history have indeed been characterized by these national-scale conflicts being played out in regional and local communities. This book explores these conflicts as well as the many emerging opportunities facing the development of the north, suggesting that a strong cultural divide between northern and southern Australia exists; one that needs to be reconciled if the nation as a whole is to benefit from northern development. The author first explores where these historical conflicts could take us without a clear forward agenda.

Contents
Themes in the North’s Recent History.- Understanding the Cultural Divide.- Southern Enclaves - Mining, Tourism and Urban Development.- Enviro-colonialism - World Heritage and the Northern Psyche. [...]
Algebraic Applications of Photogrammetry, Remote Sensing and Computer Vision

Contents

Fields of interest
; Computer Imaging, Vision, Pattern Recognition and Graphics; Geophysics/Geodesy

Target groups
Research

Discount group
Professional Non-Medical

Due August 2014
2014. XX, 335 p. 42 illus, 33 in color. (Urban and Landscape Perspectives, Volume 18) Hardcover
► approx. $179.00
ISBN 978-3-319-05367-7

Due June 2014
2014. 270 p. 95 illus., 83 in color. (Water Science and Technology Library, Volume 71) Hardcover
► approx. $129.00
ISBN 978-94-017-8877-9

Nature Policies and Landscape Policies
Towards an Alliance

Contents

Fields of interest
Landscape/Regional and Urban Planning; Nature Conservation

Target groups
Research

Discount group
Professional Non-Medical

Due January 2014
2014. 400 p. (Springer Remote Sensing/Photogrammetry) Hardcover
► approx. $279.00
ISBN 978-3-319-05367-7
C. Rega, C. Cassatella, M. Bottero, Polytechnic University of Turin, Torino, Italy; B. Chiara, Institute of Biological and Health Sciences, Maceió, Brazil; R. Grittani, University of Bari, Bari, Italy (Eds)

Landscape Planning and Rural Development

Key issues and options towards integration

Rural areas cover a large part of the European territory, representing its predominant form of landscape. Landscape preservation and rural development thus represent two cornerstones of European Union’s sustainable development policies.

Features
- Presents interesting and practice-relevant case studies
- Clearly illustrates novel techniques and tools that can be used by practitioners engaged in rural development and landscape planning
- Clearly delineates the challenges and opportunities of the forthcoming EU Programming Period 2014-2020 of the Rural Development Policy, of interest to both scholars and practitioners

Contents

Fields of interest
Landscape/Regional and Urban Planning; Environmental Management

Target groups
Research

Discount group
Professional Non-Medical

Due September 2014
2015. 120 p. 4 illus. in color. (SpringerBriefs in Geography) Softcover
➤ approx. $69.99
ISBN 978-3-319-05758-3

R. Singh, University of Delhi, Delhi, India; R. Hietala, University of Turku, Turku, Finland (Eds)

Livelihood Security in Northwestern Himalaya

Case Studies from Changing Socio-economic Environments in Himachal Pradesh, India

Contents

Fields of interest
Economic Geography; Regional/ Spatial Science; Climate Change

Target groups
Research

Discount group
Professional Non-Medical

Due April 2014
2014. XV, 235 p. 53 illus., 25 in color. (Advances in Geographical and Environmental Sciences) Hardcover
➤ $129.00
ISBN 978-4-431-54867-6

X. Zheng, C. Xue, Z. Yuan, China University of Geosciences, Beijing, China

Intensive Variable and Its Application

There are still insufficient general theories on the law of diminishing returns, despite 100 years of development. Starting with intensive variables theory, and by utilizing tools of spatiotemporal correlation and intensive functions, moving on to the integrated curve of diminishing returns and intensive theory, and even more importantly, using a combination of static and dynamic GIS, and integrating numerical calculation and spatial optimization, this book not only creates a unique theoretical framework and methodology for the evaluation of land use effect, but also addresses the long-standing lack of universal theories and methods on the law of diminishing returns. It will have far-reaching impacts on the development of this area and its practical application. The book covers a wide range fields in geography, land science, geographic information science, management science and related areas.

Features
- The first book fully elaborates intensified theory and method
- Solves the visualization of computing problems of diminishing returns in the past 100 years
- Integrates GIS (Geographic Information System) and intensified evaluation method
- Offers comprehensive case studies that could be applied to various circumstance

Contents

Fields of interest
Geography (general); Econometrics; Monitoring/ Environmental Analysis

Target groups
Research

Discount group
Professional Non-Medical

Due April 2014
2014. VI, 70 p. 24 illus., 17 in color. (SpringerBriefs in Geography) Softcover
➤ $54.99
ISBN 978-3-642-54872-7